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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/053,650	04/02/1998	KWANG CHEOL JOO	03586.0013	1592
22852	7590	11/29/2006	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			BROWN, RUEBEN M	
			ART UNIT	PAPER NUMBER
			2623	

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/053,650

Applicant(s)

JOÛ ET AL.

Examiner

Reuben M. Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27,28,32,42 and 46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27,28,32,42 and 46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 9/6/2006 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 27-28, 32, 42 & 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metz, (U.S. Pat # 5,666,293), in view of Heath (U.S. Pat # 6,360,366).

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Considering claim 27, the claimed downloading apparatus for a broadcast receiver, comprising:

‘receiver which receives a broadcast signal having a program signal and control information signal’; col. 6, lines 50-65; col. 7, lines 62-67 thru col. 8, lines 1-2 & Fig. 1 teach a STT 100, including a DET 102 that receives video programs and operating system software, which reads on a ‘control information signal’.

‘storage element which stores a control program, such that the control program controls the operation of a video program corresponding to the video program’; reads on the DET storing the operating system for the STT, which defines the basic operations of the STT 100, col. 8, lines 9-34.

‘storage element further comprising RAM for temporarily storing the downloaded control program’, met by col. 10, lines 1-9 & col. 17, lines 45-56, newly extracted operating system is stored in RAM 122.

‘non-volatile RAM including a first domain that stores predetermined number indicating that the downloaded procedure was suspended due to a power failure or transmission error’; reads on the checksum value that the DET checks to see whether it corresponds with the bit pattern used for the checksum procedure, col. 37, lines 44-67 thru col. 38, lines 1-40 & Fig. 9. In particular, in a checksum procedure, a checksum value is calculated and stored in ROM 115 to

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be used to check the validity of the new operating system. This bit pattern from ROM 115 is compared to the bit pattern downloaded with the operating system in Metz, and which accordingly is first stored in RAM 122 and then in NVRAM 121, (col. 38, lines 14-30) along with the operating system, which reads on the claimed feature, emphasis added. Termination of the processing of the first operating system, reads on 'suspending the download procedure' since the download procedure for the corrupted operating system has been suspended.

'initial boot routine includes checking whether or not a value stored in the first domain is the predetermined number and if so, automatically updating the control program', Metz discloses that the version number of an incoming operating system is checked against the current operating system and if the numbers do not match, then the incoming versions is extracted, col. 10, lines 1-9 & col. 17, lines 45-56. Metz also teaches that in an initial boot routine, the system can check for faults in the software programs or in the DET 102, (col. 22, lines 25-45) but does not specifically discuss checking whether the operating system is corrupt during transmission and then automatically updating the operating system, (i.e., control program) as claimed. Nevertheless, Heath teaches a method that detects if the operating system is corrupted during transmission and if so, may automatically download a new version from a network server, (Abstract; col. 2, lines 22-42; col. 7, lines 14-20). It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Metz with the feature of automatically downloading a new operating system, when a corrupted operating system is detected upon start-up for the advantage of avoiding a computer user the trouble of trying to

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navigate a generally complex system to achieve the same result, as taught by Heath, col. 2, lines 42-67.

Even though Metz, uses opposite logic from the claimed invention, in that in Metz, the system is upgraded when old and new operating system numbers do not match (indicating they are different versions), whereas in the instant invention, the system is upgraded when the predetermined number being looked for (with respect to the version being looked for) matches the incoming new operating system. Official Notice is taken that choosing an item when a match is found, was well known technique in the art at the time the invention was made. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Metz to operate according to the known technique of looking for a particular version number which is more precise than Metz, since Metz could potentially download any operating system with a version number different from the current version, which would potentially extract a version that it not specifically needed. However, it is more precise to search for version that has a specific identification number and only download the operating system that matches that instant version number.

Considering claim 28, wherein the broadcast signal includes a PID in order to identify the type of information of the broadcast signal, Metz teaches such a feature, col. 36, lines 54-56.

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Considering claim 32, the claimed signal processor for separating the control information signal from the broadcast signal reads on the disclosure of Metz, which teaches extracting the download program from the transmission stream, col. 10, lines 1-5.

Considering claim 42, the claimed method steps for downloading a control program from a broadcast signal in a digital receiver, corresponds with subject matter mentioned above in the rejection of claim 27, and is likewise treated.

Considering claim 46, Metz teaches that the operating system, which necessarily includes its version number, is stored in non-volatile RAM, col. 17, lines 40-45 & col. 18, lines 1-10, which reads on the claimed subject matter.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) Knox Error recovery in downloading systems.

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Any response to this action should be mailed to:

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or faxed to:

(571) 273-8300, (for formal communications intended for entry)

Or:

(571) 273-7290 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown whose telephone number is (571) 272-7290. The examiner can normally be reached on M-F (9:00-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communications and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


REUBEN M. BROWN
PATENT EXAMINER

Reuben M. Brown